

REMARKS

The Office Action dated December 2, 2004 has been received and carefully reviewed. The preceding amendments and the following remarks form a full and complete response thereto. Claims 2 and 4-9 are cancelled without prejudice or disclaimer. Claims 1, 3 and 10 are amended. The amendments are fully supported by the original specification and drawings. No new matter is added. Accordingly, claims 1, 3 and 10 are submitted for reconsideration.

The abstract of the disclosure is objected to because more than 150 words are present in the language of the abstract. A replacement abstract is attached hereto which complies with the word requirement. Accordingly, Applicants request that the objection be withdrawn.

Claims 1-10 were rejected under 35 U.S.C. § 102(e) as being anticipated by Kermode *et al.* (U.S. Patent No. 6,018,359, herein referenced as "Kermode"). Applicants respectfully traverse the rejection and submit that claims 1, 3 and 10 recite subject matter not disclosed by Kermode.

Although Kermode may teach a system for management, transmission, and control of video data providing instructions regarding partitioning of video data into segments with assigned attributes, Kermode narrowly defines these attributes as "representing control codes, and instructions enabling transport, processing, and display of video segments based solely on said set of attributes without reference to any other segment." (see, Kermode, col.10, lines 16-18) Again, reference is made to the nature of these attributes as providing instructions for the internal temporal order of each data segment, repeating the transmission of data segments over a plurality of

channels at a transmission rate, receiving successive sequential data segments, sequentially displaying the data segments with proper internal temporal order, and a number of other teachings defining the attributes as instructions for transport/receiving video data segments. (see, Kermode, col.10, lines 12-67 and col. 11, lines 1-65). As to the nature of these attributes outside transport and receiving of video data, Kermode is completely silent. Except for the user's request, no instructions or provisions for identifying and testing the relevancy of video data segments to any particular user data are made obvious by the teachings. All video data, as illustrated and instructed, "is broadcast to every subscriber, regardless of who is watching what. In a multicast model, neighborhood distribution nodes can block delivery unwanted partitions and replace them with partitions from desired movies; this occurs without affecting operation of the servers supplying the video data." (See, Kermode, col. 9, lines 37-44.) Clearly, Kermode specifically addresses broadcasting video segments where broadcast is defined on a point to multi-point basis. Individualized point to point broadcast or "microcasting" is not taught. (See, e.g., current Specification at page 17 et seq.)

Applicant respectfully submits that microcasting point to point significantly differs from broadcasting. Kermode fails to disclose microcasting of claim 1. Also, Applicant respectfully submits that the insertion of non-programming content data, such as advertising or matching of user demographics and user preferences with advertisements of similar characteristics, is not anticipated by Kermode.

In great contrast to the present invention, in Kermode, video data is segmented, transported and sequentially reassembled at the user's device for the purpose of providing multicast video on demand without providing a specific mission for the video

segments.

In contrast to Kermode, see, e.g., present Specification, at page 27 § 2. in the present invention, attributes are used to transform a video from a singular data file, which can only be stored and transmitted as a singular video stream or sequential bursts, to a collection or plurality of independent data segments than can be randomly stored, transmitted and acted upon as separate data files. The attributes comprise the instructions and associated tests for each video segment. Video segments can be transmitted in a plurality of transmission schemes, opened and viewed independently of other segments that are part of the video or can be given other instruction that could affect the timing, coordination or the ultimate content viewed or how the content is viewed. The number and types of attributes contained within a video segment will be dependent on the number and/or types of instructions necessary for the video segment to carry out its mission.

Regarding Claim 3, Kermode does teach a method of dividing a video file into a plurality of sequentially organized data segments with an associated internal temporal order for each segment. Respectfully however, as discussed, the internal temporal order informational codes are “only” used to reorder the segments in sequence when the segments are reassembled. Kermode does not speak to the insertion of non-programming content for advertising purposes or for other purposes that may be identified. Kermode appears not to have considered this insertion process within the invention or has assumed that non-programming content would be previously embedded on the programming side, within the video data. Also inherent in the use of the internal temporal order codes are segment sizes or relative lengths that comply with

the requirements of the Fibonacci transmission sequence. (See Kermode, page 1, Abstract.) Compliance to this sequence does restrict or impede the insertion of non-programming content particularly localized or individualized video-clip ad spots. (See, e.g., present Specification, Section (3) DVSM Segmenting Process, page 17, § 2, "To allow video content producers and distributors to sell advertising or other programming on a highly segmented basis, video-clip ads are dynamically assigned to program video segments based on users' particular psychodynamic and demographic profiles.")

At page 16, section (2) DVSM Formatting Process, of the present Specification, it is taught that, "The DVSM formatting process assigns attributes to each video segment based upon its characteristics, such as, the video content type, motion content within the segment, and its suitability for ad insertion. A number of DVSM attributes are assigned to user data, segmented video content data, and video advertisement data to automate the coordination and insertion of critical user information with video selections."

In view of the above, Applicants submit that Kermode fails to disclose or suggest each and every element of claim 1, upon which claim 3 depends. Accordingly, Applicants request that the rejection of claims 1 and 3 be withdrawn and that claims 1 and 3 be allowed.

Regarding Claim 10, as already described above with respect to claim 1, Kermode fails to disclose point to point microcasting, and therefore transmission and bandwidth management by necessity differs from the present claimed invention. Kermode subscribes to a modified Fibonacci transmission sequence that leverages bandwidth for broadcast using a plurality of channels without regard for differences in

available user bandwidth or a method of resolution switching that can accommodate various user bandwidth and/or processing capability of the user's premise equipment. Irrespective of the system architecture that either Kermode or the present invention teach, the systems' transmission schemes differentiate the inventions.

To resolve bandwidth and processing capacity variables, the present invention provides for the coordination of variables based on high-speed and low-speed techniques and dynamic resolution switching techniques. For example, on page 19 of the present Specification, Section (6) DVSM High-Speed and Low-Speed Video Transmission states that, "DVSM allows networks to transmit high-speed (faster than real-time) single channel, or low-speed (slower than real-time) multi-channel asynchronous video frames from the DVSM Server to the Storage inside the DVSM Client, and isochronous transmission from the DVSM Client to the video display. Since the video display is local to the DVSM Client, any short network transmission delays do not interrupt the delivery of smooth video. This hybrid data transmission technique also increases the network efficiency, since the DVSM server can dynamically allocate the available network bandwidth to its active Clients to assure uninterrupted video display." Relevant user information is dynamically collected and becomes part of the users' microcasting data.

In addition, beginning on page 19 continuing onto page 20 of the Specification, section (7), Dynamic Resolution Switching, states teaches that, "Dynamic Resolution Switching (DRS) is the technique used by DVSM Server software to ensure uninterrupted video transmissions to all the users during a time interval when the available bandwidth is not sufficient to meet peak demand. The DRS algorithm uses

inputs from variables and buffers dynamically updated by the Multicasting algorithm. The first process examines the status of these variables and buffers, and estimates available bandwidth to transmit the next batch of video segments. If the estimated bandwidth is not enough, the Bandwidth flag is set, which initiates the next process. The addresses of clients with active requests are extracted, and client service priorities are examined. The clients with lowest priority are selected and grouped together. At the end of current segment transmission, the selected clients are switched over for lower resolution transmission. The process is repeated to meet the demand of all pending client requests. After reaching a balanced state of video transmission for all the active clients, the next process starts examining relevant variables and buffers, and estimates available bandwidth to determine if a switchback to higher resolution is possible. If so, the Bandwidth flag is reset, and the next process begins to examine the active clients and their service priorities. The highest priority clients are switched back to higher resolution transmission followed by the next batch of clients until a balanced condition is reached. These processes continue working in synchronization with the polling loop timer of the multicasting algorithm.”

In view of the above, Applicants submit that Kermode fails to disclose each and every feature of claim 10. Accordingly, Applicants request that the rejection be withdrawn and claim 10 be allowed.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the Applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event that this paper is not timely filled, the Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account No. 02-2135.

Respectfully submitted,

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